

Amendments to the Specification:

Please replace the paragraph beginning at page 1, line 17, with the following rewritten paragraph:

The American Stroke Association states that stroke is the third leading cause of death in the United States and a major cause for serious, long-term disabilities, as described in <http://www.strokeassociation.org/>, 2001. Statistics show that there are more than four million stroke survivors living today in the US alone, with 500,000 new cases being added each year. Impairments such as muscle weakness, loss of range of motion, decreased reaction times and disordered movement organization create deficits in motor control, which affect the patient's independent living.

Please replace the paragraph beginning at page 10, line 8, with the following rewritten paragraph:

Virtual reality simulation module 18 can develop exercises using the commercially available WorldToolKit graphics library as described in Engineering Animation Inc., ~~WorldToolKit~~, <http://www.eai.com/products/sense8/worldtoolkit.html>, or some other suitable programming toolkit. Virtual reality simulations can take the form of simple games in which the user performs a number of trials of a particular task. Virtual reality simulations of exercises are designed to attract the user's attention and to challenge him to execute the tasks. In one embodiment during the trials, the user is shown a graphical model of his own hand, which is updated in real time to accurately represent the flexion of his fingers and thumb. The user is informed of the fingers involved in trial 54a-54d by highlighting the appropriate virtual fingertips in a color, such as green. The hand is placed in a virtual world that is acting upon the patient's performance for the specific exercise. If the performance is higher than the preset target, then the user wins the game. If the target is not achieved in less than one minute, the trial ends.